




HOME FREEZING OF FOODS

How to ► prepare
► store
► thaw
► and cook

Frozen Foods

VERA GREAVES MRAK

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FROZEN FOODS *now have a place on most home menus, either as a regular item, as an occasional emergency dish, or as an out-of-season treat. The homemaker, whether she lives on a farm or in the city, knows the advantages of frozen foods as time-savers and as a way of providing variety in her meals all year round. She is no longer limited to serving only seasonal foods, for July's strawberries may appear in December's shortcake.*

The preservation of foods by freezing storage is not new. It has been done commercially for some time. Now, however, freezers for home use are available in a variety of styles and sizes, and women have become interested in preparing, freezing, and storing food at home.

THIS CIRCULAR *is planned to help you decide what type freezing storage will best serve you, and whether a home freezer is practical for your family. It also gives you general instructions in home freezing techniques, and specific instructions for freezing fruits, vegetables, meat, fish, poultry, eggs, and precooked foods.*

A table of contents appears on page 38.

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**THE
AUTHOR**

Vera Greaves Mrak was Associate Home Economist in Agricultural Extension, Berkeley. (Resigned, December, 1948.)

will it pay me to store
frozen food for home use?

There is no standard answer to this question. Each family must decide whether home freezing storage is worth the money invested, from the standpoint of convenience, time, and/or money saved.

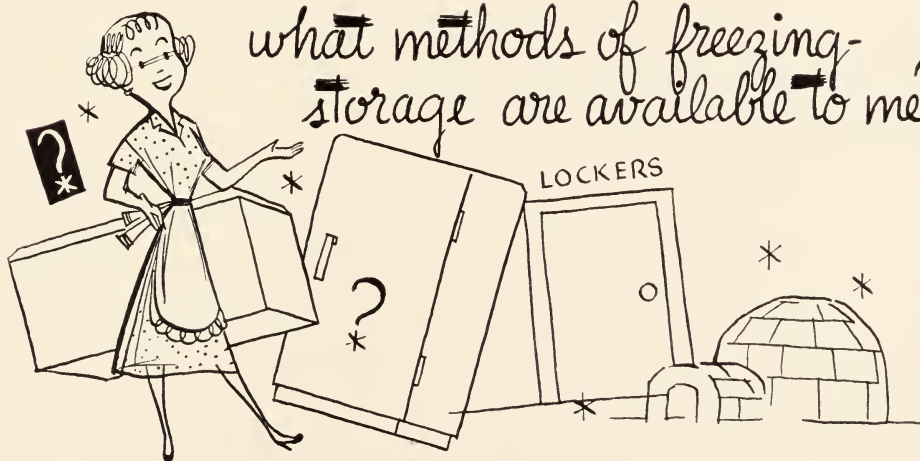
The farm family can usually make real savings in money. The most economical method for the rural family is usually the local locker plant if it is satisfactory and not too far away. A more convenient arrangement may be a moderate-sized freezing unit on the farm, and use of the locker plant for cutting and freezing large meat animals and for temporary storage.

City and suburban families may not save money through freezing storage, when the total cost is figured, unless they can buy food in quantity at reduced prices. Sometimes, the convenience of



having a variety of foods readily available outweighs this consideration. But for some homemakers, the time that is spent in getting and preparing the food while it is at top quality, and the planning necessary to insure its use while at its best after freezing may be a burden rather than a time- and money-saver. In such instances, the space which the new refrigerators provide for temporary storage of frozen food may be completely satisfactory.

what methods of freezing-
storage are available to me?



1. The Community Locker Plant

Most communities in California have locker plants where individual lockers may be rented. The charge for the locker, and the services rendered, such as cutting and wrapping meat and prefreezing food, vary widely.

The storage room in the locker plant should maintain a relatively constant temperature of 0° F, or lower, and the plant should also have some facilities for rapid freezing of food before storage in individual lockers.

2. Home Freezing Units

Many types and sizes of home freezing units are now available, from the 4-cubic-foot storage chest to the large, walk-in box with attached chill room. Sometimes it is practical for the farmer to build his own freezer, or have one built. (Plans for construction of freezer units and walk-ins are available at Agricultural Extension offices.)

A home freezer should be capable of maintaining a temperature of 0° F or lower when surrounded by an air temperature as high as 100° F. It should have at least 4 inches of insulation on sides and bottom, and at least 3 inches on the lid or door. It should be able to freeze at least 5 per cent of its total capacity per day. Do not put more than that amount into the freezer each day unless there is special provision for handling a greater quantity. Freeze larger quantities of food at the locker plant before storing them in the home freezer.

3. Storage Space in the Home Refrigerator

Many of the new refrigerators have 1 or 2 cubic feet of freezing storage space. A temperature of about 15° F is maintained in this space when the refrigerator is set for normal running. **This temperature is satisfactory for short storage periods only, as vegetables and meat stored at 15° F for more than two to four weeks show signs of loss of quality.** Fruit will keep its quality somewhat longer at that temperature. The 1 or 2 cubic feet of space are satisfactory for keeping a small amount of frozen food on hand, such as two or three weeks' supplies of assorted products. This is also adequate space for one or two weeks' supply brought home from the locker plant.

Some refrigerators now have a freezing storage compartment that maintains a temperature of 0° F. These units have separate doors to the freezing compartment which acts as a regular small freezer where food can be stored for longer than is possible in the units described above.

what size home freezing unit
should I buy?

If you have decided that, of the three methods of home freezing available, the individual freezing unit will best serve you, the next thing to consider is the size. While cost may determine the size, it is well to know the amount of storage space your family considers essential. Too large a box is an extravagance; too small a box is an annoyance. Five cubic feet for each person in the family has been suggested. However, this may prove to be larger than necessary in many counties of California where there is a year-round supply of fresh vegetables and seasonal fruits.



TOO SMALL



TOO LARGE

✓ **Check the following pointers when deciding on the minimum size for your family:**

1. Estimate the total amount of fruit, vegetables, meat, and other products your family will need for one year. How much of this will be used fresh? (See below for suggestions.)

2. Find out which foods your family prefers frozen rather than preserved by other methods, such as canning.

3. Determine how much of the food must be in the locker at any one time. Most fruits are frozen in the summer. Only vegetables that cannot be grown the year round should be frozen, and only enough to carry from one growing season to the next.

4. Estimate how much meat must go in at one time—for example, if a whole baby beef is slaughtered for storage in the home locker, it will require 10 to 12 cubic feet. Will the meat be home-grown, or bought wholesale to be cut and wrapped at the local plant? If the latter, it is probably more convenient and less expensive to rent a box at a locker plant, all or part of the year, and have a smaller storage box at home. Even when meat is home-grown, it is recommended that large animals, such as beef, be slaughtered, cut, and wrapped at a local plant.

5. Will the family increase or decrease in the next five or ten years?

✓ **Check the following figures for the approximate space necessary for different items in the freezing unit:**

One cubic foot of space holds:

about 40 pounds fruit and sirup,
or about 25 to 30 pounds vegetables,
or about 35 to 40 pounds meat

More space per pound is required for bulky items, such as whole poultry.

One cubic foot of space also holds:

about 40 pint cartons (standard size)

Each pint carton holds:

3 to 4 small servings,
or 1 pound frozen fruit and sirup,
or 10 to 12 ounces vegetables

Two servings daily of fruit would require a total of 800 pounds, as purchased, for a family of four for one year. Two or three servings daily of vegetables require about 730 pounds of potatoes and 1,160 pounds, as purchased, of other vegetables.

Many fruits and vegetables, such as oranges, broccoli, and carrots, are available fresh in California almost the year around, and need not be frozen.

Some fruits and vegetables, such as tomatoes, pears, and potatoes, do not give frozen products of the quality that justifies freezing. Raw salad vegetables do not freeze satisfactorily.

Check the list of fruits and vegetables in the charts shown on pages 14 to 17, to see which ones you wish to freeze and to decide how much of each you will use during the year.

MEAT

(Estimating 2 pounds daily for a family of 4 totals 730 pounds of meat a year)

Meat	Weight of Animal	Dressed weight	Locker space necessary to store entire amount	Family needs
Beef	800 lbs. Baby beef	lbs. 400	cubic feet 10-12	
Pork	200 lb. hog	110	3	
Lamb	80-100 lb. lamb	40	1	
Veal	180 lb. calf	100	2½	
Rabbit	10 rabbits 3 to 4 lbs. dressed	30-40	1½	
Poultry	10 chickens 3 to 4 lbs. dressed	30-40	1½	

FRUITS

(Estimating 2 servings daily for a family of 4 totals 800 pounds of fruit a year)*

Fruit	Quantity	Pint cartons necessary	Satisfactory frozen?	Estimated cubic feet to store entire amount	Family needs
Tomatoes	208 lbs.		Better canned		
Oranges	68 doz.		Probably not		
Lemons	0		Probably not		
Grapefruit	9 doz.		Probably not		
Apples	70 lbs.		No, or only small amount		
Apricots	70 lbs.	120 pkgs.	Yes	3	
Berries	18 qts.	40 pints	Yes	1	
Cantaloupe	0		Little		
Cherries	26 lbs.	50	Yes	1¼	
Figs	0		Yes		
Peaches		(Sliced) 100 pints	Yes	2½	
Pears			Better canned		
Other fruits					
Total				About 7¾	

* Tomatoes were figured for 3 servings a week, oranges for 4, cherries and peaches for 1 serving every 2 weeks. All other fruits were figured for 1 serving a week.

VEGETABLES

(Estimating 2 or 3 servings daily for a family of 4)

Vegetable	Quantity for one year as purchased	Pint cartons necessary	Freeze?*	Estimated cubic feet to store entire amount	Family needs
LEAFY: Broccoli	70 lbs.	80	Some	2	
Brussels sprouts	35 lbs.	40	Some	1	
Cabbage	60 lbs.		Not usually		
Spinach, kale, mustard	70 lbs.	50	Some	2½	
GREEN: Asparagus	35 lbs.	40	Yes	1	
Beans, snap	52 lbs.	60	Some	1½	
Peas, green	208 lbs. in pods	135	Yes	3¼	
YELLOW: Carrots	138 lbs.		Very little		
Squash	70 lbs.		Very little		
OTHER VEGETABLES: Beets	70 lbs.		No		
Cauliflower	21 heads		Some		
Corn	9 doz. ears	32 (cut)	Yes	1	
Turnips	70 lbs.		No		
Potatoes	About 500 lbs.		No		
Total				About 12½	

* Freeze only vegetables that are seasonal in your locality, and only enough to carry from one season to the next.

BEFORE YOU BEGIN . . .

In the following sections, you will find instructions for the freezing, storing, thawing, and cooking of various kinds of foods. The following pointers apply to any kind of food that you prepare for freezing storage:

1. Use only good quality foods.
2. Handle them promptly.
3. Prepare them properly.
4. Use correct packaging.
5. Seal completely.
6. Freeze foods promptly.
7. Have proper storage conditions (0°F).
8. Plan the use of the stored supply.

PACKAGING MATERIALS . . .

Changes in flavor, texture, and nutritive value occur during storage when frozen foods are loosely wrapped or not properly sealed, or when the wrapping materials are not moisture-vapor-resistant.

The material and containers listed below are all moisture-vapor-resistant enough to be satisfactory for the usual storage periods:

Moisture-vapor-resistant cellophane or pliofilm.

Heavy aluminum foil, laminated aluminum foil, glassine, or plasticized parchment paper.

Forty-pound locker paper with a heavy wax coating on one side. The waxed side should be placed against the food. Use two sheets of this paper for wrapping.

Leak-proof containers made of the above materials.

Tin cans with tight fitting lids. Use enameled or lacquered cans for red or dark-colored fruits. Leave an empty space at the top for liquid expansion—usually about 10 per cent.

Glass jars made for freezing storage. Other straight-side glass jars may break during freezing or thawing. Leave ample head space. Glass jars cost less than other

containers because they can be reused, but round containers require more locker space than do rectangular ones.

Plastic and metal boxes that may be used many times are now available and have proved satisfactory.

Cardboard containers heavily waxed on the inside, which can be heat-sealed, or which have a cellophane wrap that can be heat-sealed, or which have tight covers.

The packaging material should also be odorless and should remain sealed and unbroken at freezing storage temperatures. It should keep fruit or vegetable juices from leaking.

Moisture-vapor-resistant cellophane, in rolls, is at present less expensive than some of the newer wrapping materials. It is more moisture-vapor-resistant than the waxed locker paper.

FREEZING AND STORING . . .

Keep a notebook record or chart of all foods frozen. Include date, method of preparation for freezing, and any special information. Indicate also the date when the product should be removed from storage. This record will help you decide when and how to use the food. Mark packages with the removal date.

To Freeze at the Locker Plant:

Take packages to the plant as soon as they are prepared. Quick freeze and store at 0° F or lower.

To Freeze in a Home Unit:

Place packages in freezing compartment of the unit. Leave until solid, then place in storage compartment at 0° F or lower.

If the home unit is for storage only,

freeze only a few packages at one time—not more than 5 per cent of the total capacity of the box. Place them against the sides or coils, and leave space between them while they freeze. For storing small packages of same foods, “file” in a large plastic bag, close by twisting the top of the bag, fasten with plastic clothespin or heavy rubber band. Individual packages can then be removed easily.

Quick freeze large quantities of food at a locker plant.

PREPARATION OF FOOD . . .

To Prepare Fruit:

These instructions are general, and apply to any fruits to be prepared for freezing. On pages 14 and 15, you will find charts with specific instructions and recommendations for individual fruits.

All fruits and berries, except rhubarb and strawberries, require special treatment before freezing. This is necessary to hold the color, flavor, and nutritive value during storage. Most fruits are best if covered with a sugar sirup. Strawberries, and fruit for pies and cobbler, are better if packed in dry sugar.

1. Select fruits that are fully mature, firm-textured, highly colored, and of distinct flavor. If you wish to freeze some fruits or varieties not given in the chart (pages 14 and 15), it would be best to freeze one or two packages as a test, before storing a large amount. Not all fruits and varieties freeze well.

2. Wash fruit in cold water.

3. Decide what kind of sweetening is to be used, and the strength of the sirup. The tartness of the fruit, and the family's taste will influence your choice, as will the amount of fruit to sirup.

Cane or beet sugar sirup. (See recommendations in chart.) More than 3 cups sugar to 1 quart water makes most fruit too sweet. Less than 1 cup sugar to 1 quart water is seldom satisfactory.

Corn sirups. Regular blends of corn sirup may be used in place of half the necessary sugar. This mixed sirup will be less sweet than the all-sugar sirup. Sweeter, specially developed corn sirups may be used, in proportions of 1 cup corn sirup to 1 or more cups water, or in the same proportions as the regular corn sirups. The flavor of this sirup is noticeably different from that of cane or beet sugar.

4. Add sugar or corn sirup to cold water to make the sirup. Stir carefully until sugar is dissolved. (It is not usually necessary to add ascorbic acid to prevent darkening of fruits if they have been care-

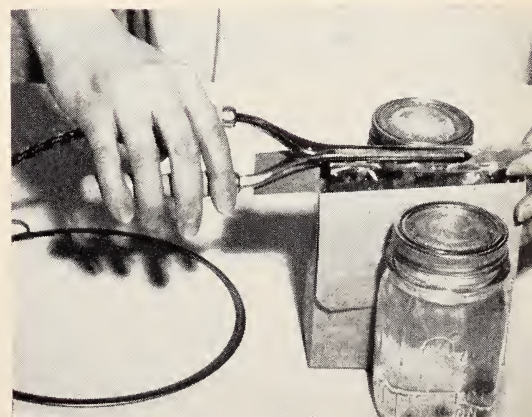


Above: Fill inner bag.

Below: Fold ends.



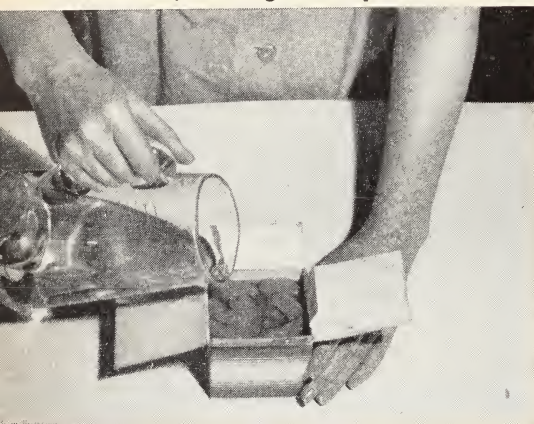
Heat seal.



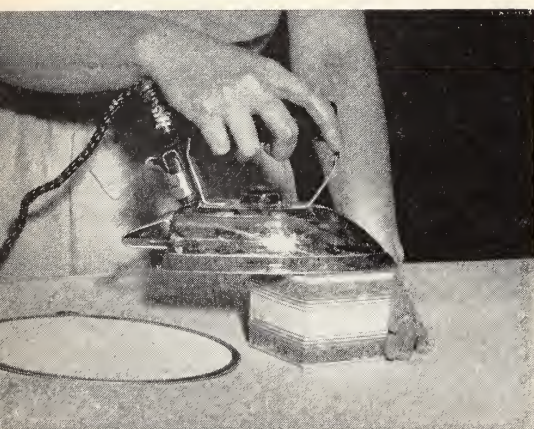


Above: Cut fruit directly into sirup.

Below: Cover, leaving head space.



Seal carton.



Use dry pack for berries.



fully handled. If darkening is a problem, however, 1 teaspoon ascorbic acid may be added to 3 quarts of sirup. This is equivalent to about 1 gram of granular ascorbic acid to 1 quart of cold sirup.)

For a dry sugar pack, use 2 cups sugar to 4 to 6 pounds fruit.

5. Prepare the fruit as it will be served. Remove any inedible parts, such as skins, pits, or cores. Cut large fruits into smaller pieces. (Cut fruits that discolor directly into cold sirup, either in the carton, or in a bowl.) Be careful not to bruise fruit.

6. Package in a suitable container. Leave head space (empty space) at top of carton— $\frac{1}{2}$ inch for a 5-inch carton. Be sure sirup covers the fruit. Cover with a piece of locker paper cut to fit surface.

7. Seal container. Use a hot iron for heat-sealable containers. Use tight fitting lids for all others.

8. Date and label all cartons.

9. Freeze. Put packaged fruits in the refrigerator if they must stand a short time before freezing.

10. Store at 0° F or below.

To Prepare Fruit Purée:

Fruit purées may be used in frozen desserts, as sauce for ice cream, in cake fillings, and for making jam or jelly.

1. Use whole, mature fruit, or sound parts of slightly damaged fruit.

2. Wash, peel if necessary, and crush. Simply mash the fruit, or use a well-tinned meat chopper or a food mill.

3. Add dry sugar to taste—as little as 1 cup to 6 to 8 cups of purée.

4. Package in a suitable container, leaving head space. Cover with a piece of locker paper cut to fit surface. Seal.

5. Label. Give amount of sugar used. (You will need to know this when you come to use the purée.)

6. Freeze.

To Prepare Fruit Juices:

Fruit juices should be heated before being frozen, otherwise they develop a jelly-like pectin clot during storage. This

is unattractive, and limits use of the juices. Heating prevents such clotting.

1. Heat apricots, berries, red cherries, red grapes, and plums to 165°–170° F, in a small amount of water, before extracting juice.

Extract juice from apples, white cherries, white grapes, and citrus fruits, then heat it in a double boiler, to 165° F.

2. Add some sugar to all juices except citrus. Use as little as 1 cup sugar to 6 to 8 cups juice.

3. Chill the juice. Pour into suitable containers. Leave head space— $\frac{1}{2}$ inch for a 5-inch carton. Seal.

4. Label. Give amount of sugar used.

5. Freeze.

To Prepare Vegetables:

All vegetables (except pimientos and peppers) should be blanched or cooked before freezing. This prevents loss of color, flavor, and nutritive value during storage.

These instructions are general, and apply to any vegetables to be prepared for freezing. On pages 16 and 17 you will find charts with specific instructions and recommendations for individual vegetables.

1. Use young, barely mature vegetables. Older ones do not freeze well. (Exception: Use beans that are fully matured but not stringy or tough.)

2. Harvest vegetables early in the morning. Prepare them as you would for the table; freeze as soon as possible.

3. Wash in cold water. Cut, and sort according to size. Take care not to bruise vegetables.

4. Blanch in boiling water:

Use enough water to cover the vegetables completely.

For nonleafy vegetables, use about 2 quarts of water per pound.

For leafy vegetables, use about 3 quarts of water per pound.

Do not blanch more than 2 pounds of vegetables at one time. Put them into a wire basket, colander, cheesecloth bag, or

any other container that allows free movement of the vegetables, and immerse them in briskly boiling water.

Start counting blanching time when the water comes to a boil again, after vegetables are immersed (see chart). If the water takes more than a minute or two to return to the boil, blanch a smaller quantity of vegetables at one time. The water may be used several times, for blanching the same kind of vegetables.

5. Chill. Do not pack vegetables while they are hot. Lift them from the boiling water and put at once into a pan containing ice and water. Use only a small amount of water—just enough to cover the vegetables. Add ice as needed. Do not chill vegetables in running water.

Test for proper chilling of vegetables such as peas or asparagus by breaking or cutting. The vegetable should be chilled to the center. Chill at least as many minutes as the blanching time, except in the case of corn on the cob which should have the time doubled.

6. Remove from water, drain, pat dry, and package.

7. Heat-seal packages, or use tight fitting lids.

8. Long vegetables, such as corn, broccoli, and beans, may be wrapped in heat-sealable paper. Use druggist's or butcher's wrap. Seal each fold.

9. To package irregularly shaped products, such as green peppers, put them into a pliofilm bag, plunge the bag quickly into a deep pan of water, keeping the top of the bag well above the surface of the water. Twist top and fasten while air has been driven out by force of the water.

10. Freeze at once.

To Prepare Vegetable Purée:

1. Blanch vegetables as directed.

2. Cool, and put through a purée or food chopper. (Heat tomatoes to 165° F either before or after puréeing.)

3. Chill quickly.

4. Package.

5. Freeze at once.



**Blanch vegetables in
boiling water.**



Chill quickly.



Package promptly.



**Wrap meat tightly.
Seal, label, and date.**



To Prepare Meat:

1. Select healthy, well-conditioned, young animals.

2. Kill and prepare carcass as for fresh meat.

3. Chill meat rapidly. If it is held in the chill room longer than the time recommended, it will not keep so well in storage.

4. Chill and age meat at temperatures from 32° to 34° F. Lamb, pork, and veal need not be aged, but should be chilled 1 to 2 days. Beef will chill and age enough in 5 to 7 days.

5. When carcass has been properly chilled and aged, cut into pieces of desired size.

6. Wrap. If waxed locker paper is used, place the waxed side against the meat, and use two sheets. In stacking steaks or

chops, put a piece of locker paper between each one. Place the meat in the center of the paper. Use enough paper so that you can fold the edges down at least three times. If cellophane or pliofilm is used for the first wrap, an outer wrap of heavier paper or stockinet must also be used.

7. Bring two edges of the paper together above the meat, and fold down in 1/2- to 1-inch folds until the paper is tight against the meat. Fold ends in the same way. Press paper firmly against meat.

8. Fasten securely with twine or odorless tape.

9. Label. Give weight, date, type of meat, number of servings.

10. Freeze and store.

DIRECTIONS FOR FREEZING FRUITS

VARIETIES: Not all varieties of the different fruits are satisfactory for freezing. The ones recommended in the list have been found to give best results. Where no specific one is recommended, any may be used.

PACKAGING: Pack fruit into suitable containers. If sirup is used, leave head space. Seal. Freeze.

STORING: Store at 0° F or below.

Fruit	Preparation	Sugar
Apples	Peel, core, and slice. Make into applesauce, or sirup scald for 2 minutes.	Sirup scald: 1 cup sugar to 1 quart water. Bring to a boil.
Apricots: Blenheim (Royal), Moorpark, Tilton	Peel, cut into quarters or slice into cold sirup.	Cold sirup: 3 cups sugar to 1 quart water.
Avocados	Peel and stone fruit. Purée. Add lemon or sugar to taste. (May be used in ice creams, sandwiches, salads, etc.)	If you add sugar: 5 parts by weight of pulp to 1 part by weight of sugar.
Berries (except strawberries)	Wash if necessary. Pick over.	Cold sirup: 2 cups sugar to 1 quart water. Dry sugar as desired, or freeze without sugar.
Cantaloupe	Use firm, ripe, highly flavored melons. Cut in half; remove seeds. Cut balls or cubes into cold sirup. (Best when used with mixed fruits.)	Cold sirup: 2 cups sugar to 1 quart water.
Cherries (sour)	Wash. Pit if desired.	Dry sugar: 1 pound sugar to 5 pounds cherries.
Cherries (sweet): Bing, Lambert, Royal Ann	Wash. Pit if desired.	Cold sirup: 2 to 3 cups sugar to 1 quart water.
Coconut (fresh)	Shred. Add coconut milk. (To use, pour off milk and add sugar as desired.)	No sugar when packed.
Cranberries	Use firm, deep red berries. Stem. Wash.	Pack without sugar.
Currants	Use whole, fully ripe. Wash. Stem.	Pack without sugar or dry pack— $\frac{3}{4}$ cup sugar to 1 quart water.

Dates	Wash. Drain.	Pack without sugar.
Figs: Calimyrna, Kadota, Mission	Wash. Peel if desired. Cut Calimyrnas and discard if sour.	Cold sirup: 1 to 2 cups sugar to 1 quart water.
Grapefruit	Peel, cutting deep enough to remove white membrane under skin. Section, using stainless steel knife and removing membranes between sections.	Freeze with or without sugar. For sugar: 1 pound sugar to 5 pounds fruit. Dissolve sugar in juice from fruit without heating. Pour sirup over fruit. Add water if necessary.
Grapes: Muscat, Thompson seedless	Pick over. Remove stems. Wash. (Best when used with mixed fruits.)	Cold sirup: 2 cups sugar to 1 quart water.
Nectarines	Peel. Cut into quarters, halves, or slices, directly into sirup.	Cold sirup: 2 to 3 cups sugar to 1 quart water.
Oranges: Any except navels	Same as for grapefruit.	Same as for grapefruit.
Peaches: Elberta, J. H. Hale, Rio Oso Gem	Peel. Cut into quarters, halves, or slices, directly into sirup.	Cold sirup: 2 to 3 cups sugar to 1 quart water.
Persimmons: Fuyu, Hachiya	Peel. Remove any seeds. Purée.	1 pound sugar to 6 pounds purée.
Plums: Beauty, Gaviota, Santa Rosa	Cut into halves, or purée.	Cold sirup: 3 cups sugar to 1 quart water. Dry sugar: 1 pound sugar to 3 pounds plums.
Rhubarb	Wash and cut into desired lengths.	Dry sugar as desired, or freeze without sugar.
Strawberries: Banner (Marshall), Klondike, Driscoll A-1	Wash if necessary. Pick over. Remove hulls. Crush with sugar, or slice. Place a few whole berries in carton for garnish.	Dry sugar: 1 pound sugar to 4 to 6 pounds berries.
Mixed Fruits	Use any combination desired. Prepare each fruit separately according to directions above. Mix.	Cold sirup: 2 to 3 cups sugar to 1 quart water.

DIRECTIONS FOR FREEZING VEGETABLES

VARIETIES: Unless specific varieties are recommended, any variety of the vegetables in the list is suitable for freezing.
BLANCHING: Blanch all vegetables unless other preparation is indicated. Use boiling water. Start counting blanching time when water resumes boiling after vegetables are immersed.

CHILLING: Chill all blanched vegetables (except mushrooms and olives) in ice water before packaging.

PACKAGING: Drain vegetables after blanching. Pack in suitable containers. Seal. Quick-freeze promptly.

STORING: Store at 0° F or below.

Vegetable	Preparation	Blanching Time
Artichokes	Pull off outer bracts. Cut off top of bud. Trim stem. Wash.	8 to 10 minutes. Or 8 to 10 minutes in boiling citric acid solution (3 teaspoons citric acid crystals to 2 quarts water).
Asparagus	Wash. Cut. Freeze promptly for best results.	2 minutes.
Beans: lima, Henderson bush, Fordhook	Remove pods. Wash. Sort for size.	2 to 3 minutes.
Beans, snap: Blue Lake or Burpee	Use tender, stringless beans. Wash. Cut into 1-inch pieces, or French cut.	1½ minutes.
Beets	Mature beets: cook, then peel, slice or dice, before freezing. Small, tender beets: wash, peel, dice, or leave whole.	Small, whole: 5 minutes. Uncooked, diced: 3 minutes.
Broccoli	Wash. Cut to serving size. Split large stalks.	3 to 4 minutes.
Brussels sprouts	Trim off outer leaves. Wash.	4 to 5 minutes.
Cabbage	Remove outer leaves. Quarter and core. Cut into 1-inch wedges.	1 minute.
Carrots	Cut into ½-inch pieces, or dice.	2½ minutes.
Cauliflower	Wash. Break to serving size pieces.	3 minutes.
Celery	Use crisp, tender celery. Trim. Cut into 1-inch lengths.	3 minutes.

Corn on cob: Yellow var.	Use slightly immature corn with fully developed kernels. Husk, de-silk.	8 to 10 minutes, depending on size.
Corn, cut: Yellow var.	Same as for corn on cob. Cut kernels from cob after blanching and chilling.	1 1/2 minutes, on cob.
Greens	Use young, tender leaves. Wash.	1 1/2 minutes.
Mushrooms Caution: Use only edible var.	Use small, fresh ones with tight, white caps. Cut off base of stems. Slice or leave whole. May be fried in butter or margarine before freezing, instead of blanching.	2 to 4 minutes. NOTE: Chill in iced citric acid solution (3 teaspoons citric acid crystals in 2 quarts water).
Okra	Use young, tender green pods. Wash. Cut off stems but do not cut open seed cells. Leave whole or slice crosswise.	Small pods: 3 minutes. Large pods: 4 minutes.
Olives: Mission var.	Prepare according to 1-lye or 3-lye process. (See Univ. of Calif. leaflet, 1945, "Home Pickling of Olives.")	Boil 10-15 minutes in brine containing 6 1/2 tablespoons salt per gallon of water. Drain off brine, and chill before freezing.
Peas, Wyola	Remove pods. Wash. Sort for size.	1 minute.
Pimientos and Peppers	Wash. Remove stem and seeds. Cut in halves, slice, or dice.	Do not blanch.
Pumpkin	Use mature, fine-textured pumpkin. Cut into chunks. Peel. Cook. Mash or sieve. Cool.	Cook until soft.
Squash: Italian, Summer, Crookneck, Zucchini	Use young squash. Wash and cut into 1/2-inch slices.	3 minutes.
Squash, winter	Use well-ripened, fully mature squash. Peel and cut into 1-inch cubes. Cook until soft. Purée.	No blanching required.
Sweet potatoes	Use mature sweet potatoes. After blanching: Cool. Peel. Dip whole or sliced in a solution of 1/2 cup lemon juice to 1 quart water for 5 seconds. Mix 1 quart mashed sweet potatoes with 2 tablespoons orange or lemon juice.	Cook until almost tender in water, steam, pressure cooker, or in the oven.
Mixed Vegetables	Use any combination desired. Prepare each vegetable separately according to directions above. Mix after blanching.	See blanching time for each vegetable.

STORAGE PERIODS

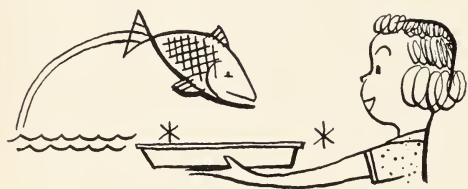
Long storage impairs quality. Use first the food that has been stored longest. The following storage times are a guide for foods stored at 0° F:

Fruits, vegetables, and eggs	season to season
Ground meat	1 to 3 months
Pork, fish, and lamb	3 to 6 months
Beef, veal, and poultry	9 to 12 months
Fruits and vegetables	12 months

The storage life of most precooked foods is much shorter than that of uncooked foods. Too long storage results in a change in flavor and texture. Suggested storage periods are:

Pies	2 to 4 months
Baked breads and cakes	4 to 6 months
Meats, stew, etc.	3 to 6 months
Batters and doughs	1 to 3 months
Cooky doughs	6 to 8 months

To Prepare Fish:



1. Use only fresh fish. Clean, scale, dress, and wash.

2. Seal in airtight package. This is necessary, to keep fish odor from getting into other foods.

3. Date, label, and freeze quickly.

Fish may also be glazed before wrapping. To do this, freeze fish, dip quickly into cold water, and refreeze. Wrap glazed fish tightly, as for meat.

To Prepare Shellfish:

Oysters. Wash in fresh water for 5 to 10 minutes. Do not cook. Pack in suitable liquid-tight containers. Seal and quick freeze.

Clams and Scallops. Wash in salt solution, 1 tablespoon salt in each quart of water. Do not cook. Pack in liquid-tight containers. Seal and quick freeze.

Crabs and Lobsters. Steam or boil for 15 to 20 minutes. Cool. Remove the meat from the shells, or crack and package in shells in salt solution, using 1 teaspoon salt to 1 pint water. Pack in liquid-tight containers. Seal and quick freeze.

Shrimp. Remove and discard the heads. Package and freeze the meat in the shells, without cooking.

NOTE: Do not store shellfish longer than a month or two as the meat of most shellfish tends to toughen on longer storage.



To Prepare Poultry:

1. Select plump birds with well-fleshed breasts and legs. If older, or less well-developed birds are used, restrict their range for about two weeks before they are killed, and supply them with ample growing mash, skim milk or buttermilk, and grain.

2. Hang the bird by the legs for one minute, immediately after killing, to allow complete bleeding.

3. Semiscald by immersing at once in water 125° to 135° F until the feathers loosen. Agitate vigorously. The bird must be scalded at once after killing if it is to pick easily when semiscalded. A heavy scald—175° to 185° F—may be used, but it results in poor appearance and increases the tendency toward freezer-burn.

4. Hang bird by the feet and remove feathers and pinfeathers. A strawberry huller and No. 8 crochet hook are helpful in removing pinfeathers.

5. Singe to remove hairs. Wash in cool water, using soap or soda. Rinse.

6. Chill completely by placing in the refrigerator not longer than 24 hours, or place in ice water for 2 or 3 hours.

7. Prepare for wrapping. First, cut out the oil sac from above the tail. Remove head and feet. Leave a roaster whole, but remove entrails. Disjoint and cut fryer or bird for fricassee, drawing before or while cutting. Split broiler along back-bone after removing head and feet, remove entrails, cut bird in two along the

side of the breast bone. Separate heart, liver, and gizzard from entrails. Remove contents of gizzard; remove gall bladder from liver. Wrap giblets separately. Omit livers, or freeze them separately and use within three months.

8. Wrap or pack each bird tightly in moisture-vapor-resistant paper or containers. This helps prevent freezer-burn, or drying out.

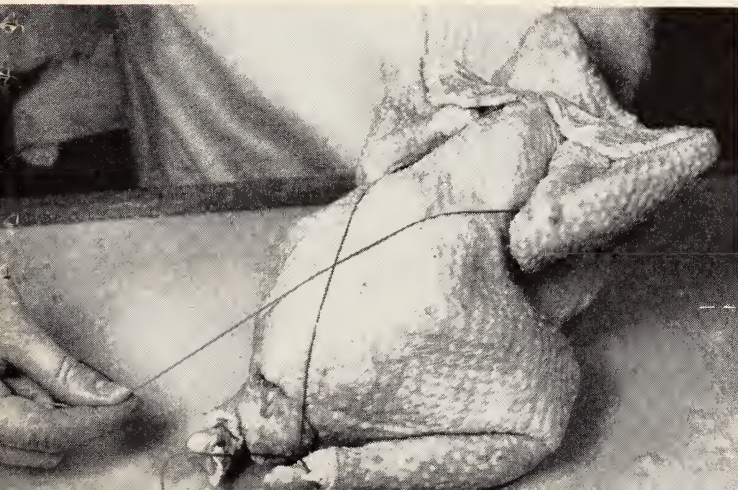
9. Label, giving weight, date, and type of bird.

10. Freeze and store.

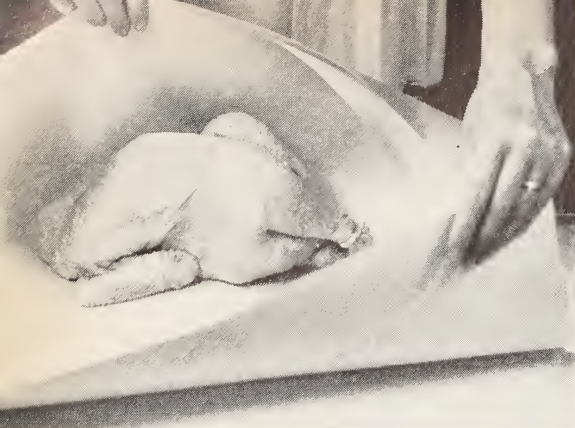
Roasters. Place wrapped giblets in body cavity. For tying, use about 1 yard of heavy twine. Tie the legs together, flatten them against the body, and secure by looping the twine over the tail. Holding the twine taut, bring it diagonally across the back and under and around the wing. Fold wing tip against the back. Draw string over to second wing, catching neck skin under string. Loop string over, then under the second wing. Bring it back to the first leg and tie the ends firmly.

Broilers. Place a piece of cellophane or double-folded locker paper between the halves. Include wrapped giblets in the package. Wrap as directed for roasters.

NOTE: Frozen poultry develops slight changes in texture and flavor after about 6 months' storage at 0° F. These changes usually become noticeable after 9 to 12 months. Do not plan to hold over 12 months.



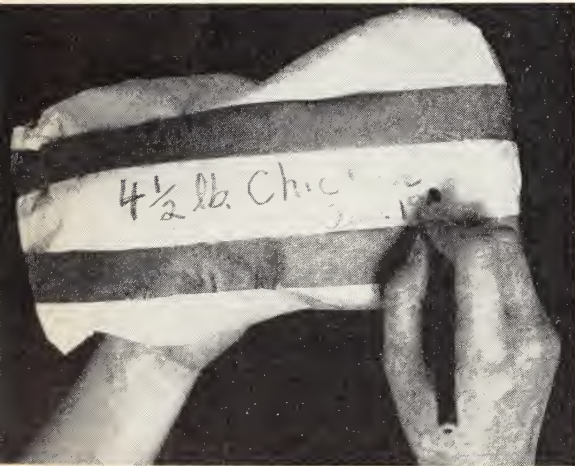
Tie roaster securely.



To wrap, place tied bird in center of a square of suitable locker paper.



Bring edges of paper together and fold down in $\frac{1}{2}$ - to 1-inch folds until paper is tight against the bird. Fold ends in the same way.



Fasten securely with twine or odorless tape. Label, and date.

Below: If cellophane or pliofilm is used for wrapping, an outer wrap of heavier paper or stockinet must also be used.



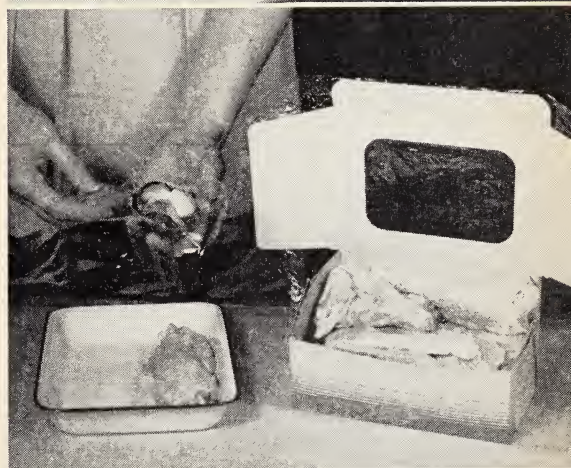
For fryers or fricassee birds, pack large meat pieces into the cavity of the back sections. (If desired, bony pieces may be omitted.)



Put wrapped giblets with other pieces, and place small ends of the legs toward the center of the pack. Wrap as directed for roasters, making as nearly square-sided a package as possible.



Or pack pieces into a waxed carton or cellophane bag.



Seal the package, or cover with cellophane and seal.



To Prepare Eggs:

Whole eggs: Break eggs, mix yolks and whites together. (This mixture remains rather thick when thawed. Thickening may be prevented by adding $\frac{3}{4}$ teaspoon of salt or 2 tablespoons of sugar to each cup of mixture, but this limits the use of the eggs.)

Egg yolks: Separate from whites. Mix 1 teaspoon salt or 2 tablespoons sugar into each cup of yolks.

Egg whites: Separate from yolks.

To package:

1. Package, leaving head space, and seal.
2. Label (give number of eggs in each carton), freeze, and store.
3. Freeze in ice cube trays. Package in plastic bag. (Give number of eggs in each cube.)

NOTE: Freezing does not sterilize foods, and those cooked before freezing are often more subject to spoilage when thawed than are fresh foods.



According to the California Fish and Game Commission, located in the Ferry Building, San Francisco, the State law specifies that deer may be held 15 days after the close of the season, without any permit.

To obtain a permit to keep deer out of season, you must have the hunting license and the deer tag number. The fee is \$1.00 per carcass, and the permit can be obtained at the locker plant or from the Fish and Game Commission. After obtaining a permit, you may keep venison indefinitely.

There is no season in which antelope may be killed in California. If it is brought in from another state, you must fill out a declaration of entry which you can get from the California Fish and Game Commission.

Duck cannot be held longer than 90 days after the end of the season. This is a Federal as well as State regulation. There is no provision for longer storage.

Pheasants must be taken to the California Fish and Game Commission during the season to be tagged. They can then be held indefinitely.

Fish may be held for 10 days after the close of the season. There is no regulation for longer storage.

THAWING AND COOKING FROZEN FOODS . . .

Frozen foods, when thawed and cooked, should have the bright color, firm texture, appetizing odor, full flavor, and high nutritive value of the best quality fresh food. To insure this high quality, store frozen food only for the period recommended, and use proper thawing and cooking methods.

When you remove foods from freezing storage, place them in the freezing compartment of your refrigerator immediately. They may be kept there safely for at least 2 weeks.

Keep food frozen until ready to use. In an emergency, however, frozen food placed in a refrigerator at 38° to 40° F may be held for 2 to 3 days, but it must be watched for signs of spoilage.

Throw away any thawed food that looks off-color, has a peculiar odor, or is slimy. **Do not taste it.**

Precooked Foods

Some foods, such as baked apples, sandwiches, breads, and cakes, need no heating to prepare them for the table. Except for frosted cakes, it is best to thaw the foods while they are still wrapped. Casserole dishes may be reheated without previous thawing, or when partially thawed. The method for reheating depends upon the type of food

and your personal preference. It may be done by using the broiler, the oven, or a double boiler on top of the range. If you use the broiler, have the heat farther away from the food than you would for unfrozen foods. Otherwise, foods will be seared on the outside before the center has time to heat.

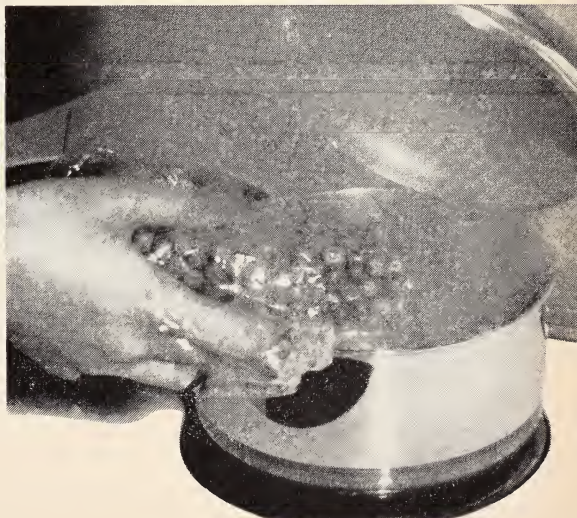
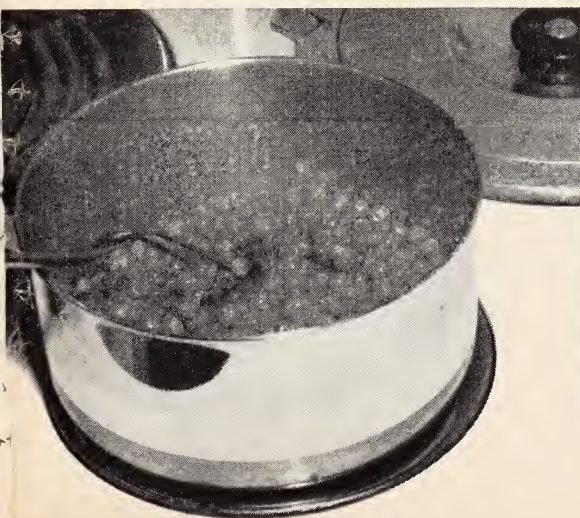
Vegetables

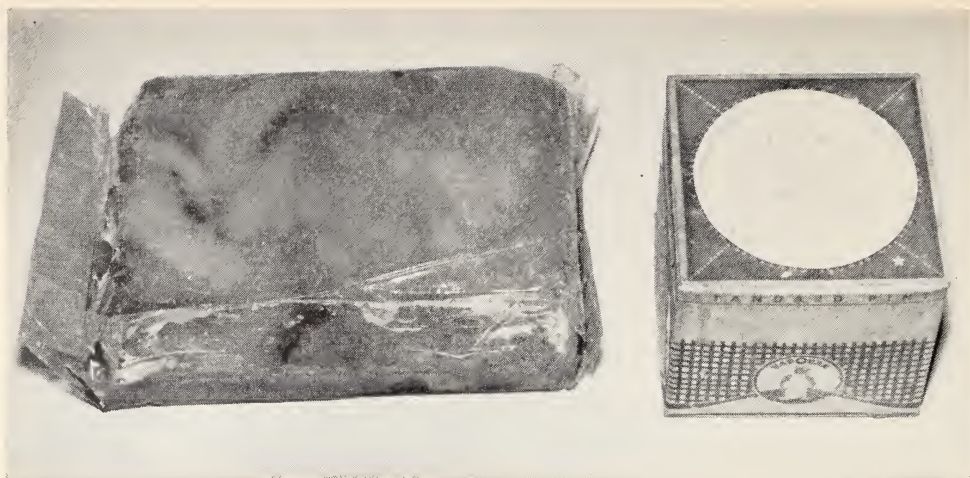
Vegetables lose quality if allowed to thaw before cooking. Start cooking them while they are still frozen. (Exception: corn on the cob. Thaw before cooking. Its flavor will be better if cooked by steam or buttered and heated in the oven without additional water.) There is no point in using a pressure cooker for frozen vegetables—no time is saved, and there is danger of overcooking.

Cook vegetables in briskly boiling, salted water— $\frac{1}{4}$ to $\frac{1}{3}$ cup for a 12-ounce package. More may be added, if necessary, as the vegetables cook. (Even strong-flavored vegetables, such as broccoli and Brussels sprouts, need only this small amount of water.)

Add vegetables to the boiling water. Cover until the water returns to boiling. Uncover to finish cooking. Most of the water should be evaporated by the time the vegetables are done. The flavor of

Cook vegetables, while still frozen, in small amount of boiling water for a short period of time.





Thaw fruit in unopened container, in refrigerator or at room temperature.

some vegetables, such as peas, corn, beets, and carrots, is improved if 1 teaspoon of sugar is added to the cooking water.

Cooking time varies with the maturity and variety of vegetable. **Do not overcook.** Overcooking may cause undesirable changes in color, flavor, and texture due to blanching before freezing and change in texture during freezing. Vegetables may be cooked in the oven, boiled, or pan-fried.

Here are suggested cooking times:

To boil: After the water boils,

5 minutes for: asparagus, broccoli, Brussels sprouts, cauliflower, cut corn, peas, spinach.

5 to 10 minutes for: snap beans, lima beans.

To bake: Put vegetable in greased casserole. Add table fat and seasoning. Cover and bake until just tender, approximately 45 minutes at 350° F.

To pan fry: Use a heavy fry pan with cover. Place 1 tablespoon fat in pan, melt, add 1 pint frozen vegetable. Separate pieces. Cook over moderate heat until just tender—10 to 20 minutes.

Fruit may also be thawed in cold water.



Fruits

Most fruits have the best flavor and color if served just before they are completely defrosted.

Thaw fruit in the **sealed** container. This helps prevent change of color.

To thaw a 1-pound package:

1. Place in a pan of cold water for $\frac{1}{2}$ to 1 hour, **or**
2. Leave in the refrigerator for 6 to 8 hours, **or**
3. Leave at room temperature for 2 to 3 hours.

Do not thaw more than you plan to use at one time. Most thawed fruits darken and lose flavor if left standing. If you have to hold fruit after thawing, simmer it for a few minutes, and chill before storing. This helps preserve the fresh color and flavor.

Frozen fruits to be cooked should be thawed and used in the same way as fresh fruit. If they are used for pies, thaw them only enough so that they may be separated and spread apart.

Meat

There is no consistent difference, in losses of flavor or juiciness, between meat thawed before cooking and meat cooked while still frozen.

Use the method of preparation most suitable for the particular cut and kind of meat. Under usual conditions, freezing does not tenderize meat.

If the meat is to be thawed, leave it in the unopened container, or in one that will collect the drippings. To thaw: Leave at room temperature for 2 to $2\frac{1}{2}$ hours. An electric fan may be used to speed up thawing. Or leave in the refrigerator, allowing about 5 hours per pound of meat. Thawing time will vary with weight and shape of the meat, thickness of wrapping, and room temperature. Do not thaw unwrapped meat in cold water.

Steaks and Chops. Thaw and cook according to directions for fresh meat, or cook without thawing. If you do not thaw the meat, allow it to cook slightly longer

than you would fresh meat—about 8 minutes longer for 1-inch-thick pieces; 14 minutes longer for $1\frac{1}{2}$ -inch pieces.

Oven Roasts. Thaw and cook according to directions for fresh meat, or cook without thawing, or when partially thawed. If you do not thaw the meat, place it in the oven, which has been set for 275° to 300° F, with a meat thermometer. Insert the thermometer through a hole in the meat muscle so that the bulb is in the center of the roast but not against a bone. If the meat is frozen too hard to get the thermometer in, start the cooking and insert it after the roast thaws. Cook partially frozen meat about 10 minutes longer per pound than you would fresh meat. Cook completely frozen meat 20 to 25 minutes longer per pound.

Less Tender Cuts. Cook by moist heat, according to the usual directions. Allow a slightly longer time for large pieces of unthawed meat.

Remove birds from storage. Thaw fryers, broilers, or roasters in the refrigerator or at room temperature. Fricassee birds need not be thawed. Place them directly into the liquid in which they are to be cooked.

Cook all frozen poultry in the same way that you would prepare fresh birds.



FREEZING PRECOOKED AND PREPARED FOODS...

**This section was prepared by Olive C. McCracken,
Home Advisor, Solano County**

There are times when a supply of pre-cooked or prepared foods is a boon to the homemaker. However, it is unwise to freeze such foods unless you have a definite plan for their use. The quality of foods does not improve with freezing, and there is marked deterioration if storage is overlong. The nutrient content of foods that are precooked, frozen, and then reheated for serving is probably lower than that of freshly prepared foods.

Your reason for freezing foods may be:

To save time. (Make a supply of foods for putting up lunches.)

To save money. (Freeze seasonal foods when prices are low.)

To prepare ahead for a busy season.

To use planned leftover or holdover foods.

To prepare for a party a few days ahead.

Whatever your reason for putting the food into the freezer, **do not forget to use it.** Do not put more prepared foods into freezing storage than you will enjoy using within a reasonable time.

Keep in mind the following pointers:

Use first-quality foods—the freshest eggs, butter, fat for frying, and the like. For instance, a fat is sometimes considered “all right for cooking” although it may not be table fresh. This does not apply if the product is to be frozen for any length of time. Do not start with a food that has already begun to break down.

Use pure extracts of vanilla and other flavorings. Synthetic flavors become bitter during freezing.

Use double-action baking powder for frozen **batters.** Use the one you are accustomed to for prebaked products.

Spices and seasonings change flavor. In general, the stronger ones, such as pepper, onion, cloves, and garlic, become stronger. Mild-flavored seasonings, such as salt, fade.

There may be some color changes. Protect red, white, or yellow with an acid food such as orange juice, lemon juice, or sour cream. This is important when packaging mixed fruits for salads.

There may be changes in textures.

Hard-cooked egg whites become tough.

Raw vegetables lose crispness.

Mayonnaise separates during storage and thawing.

Cheese sauce has a rough texture unless eggs are used in making it.

Cream sauces may separate. They usually recombine if stirred while heating. A new, waxy rice flour now on the market may be used as thickening agent. It gives a smooth texture that does not separate. (Ask your Home Advisor where this flour may be purchased.)

Boiled potatoes in precooked foods, such as stews, become mushy and dark.

Raw onions discolor; they should be sautéed or steamed until clear before being added to mixtures.

Stews will have less “leftover” flavor if the meat is frozen in unthickened broth or if the broth is thickened with waxy rice flour. Add freshly cooked vegetables and thickening when reheating.

It's a good idea:

To keep a chart listing each food in your freezer, with special information about it, including the recipe used and where the food is stored. The chart may be simple—see top of next page.

Food	Date prepared	Recipe	Where stored	Should be used by	Remarks
Angel cake	Feb. 6/52	Boston Cookbook p.....	Basket #1 or Shelf #1	Aug. 6/52 (Used Mar. 6/52)	Excellent
Meat pie	Mar. 4/52	Aunt Mary's	Basket #3	Sept. 4/52 (Used May 1/52)	Don't overcook veg. next time

To draw your chart on the inside of a manila folder. Your instruction books can be filed in the folder so that all freezing information is together.

To label carefully. Label with removal dates, and become aware of their significance. It is important to know the date the food entered the freezer, but it is more important to remove that food before the maximum storage period is up. Other information on the label may include instructions for completing the preparation, seasonings to be added, and number of servings in package.

To rotate foods rapidly. Freezing storage is expensive storage unless there is a turnover of foods. It may be possible to keep some precooked foods for as long as a year, but it is wiser to use them soon, thereby releasing space for other foods.

To freeze foods in small quantities in not-too-thick portions. Blocks of food that are flat, and square or oblong in shape, freeze quickly and uniformly. They should be not more than 2 or 3 inches deep.

Frozen Plate Meals

It is not practical to freeze and store food on a plate. You may, however, package individual servings of meat, two vegetables, apple or cranberry sauce, or relishes, such as pickles, olives, and spiced peaches, and a piece of cake or pie. These individual packages can then be placed in a carton and stored in the freezer. To prepare for serving, thaw relishes and desserts at room temperature while vegetables and meat are being heated.

Contents of the package and directions for using should be plainly stated on the label, in addition to the dates when food should be removed.

If the Power Fails

Freezers that are full of food will not warm up so rapidly as will partially filled ones. Power failure of short duration may not damage foods to a great extent. Keep the lid closed. Put blankets over and around the freezer to add more insulation. You may put dry ice into the freezer. If the trouble affects only your home and not the community, you may transfer the food to a local commercial locker plant. But if the food should thaw, for complete safety, these precautions are advised:

Cooked dishes, such as chicken à la king—do not use.

Fruit—if it has not fermented or molded, refreeze or cook.

Vegetables—if they have not reached a temperature above 50° F, and no off-odor is noticeable, refreeze or cook.

Meat—if it has not reached a temperature of 50° F, and no off-odor is present, the meat is probably all right and can be refrozen or cooked.

Fish—do not refreeze or cook if it has reached a temperature above 45° F.

Good Packaging and Good Storage Are Essential

In packaging any frozen foods, it is essential that **air be excluded**. A hard block of food can be closely wrapped much more easily than a soft mass. For this reason it is sometimes recommended that baked foods be **quick frozen**, then packaged. To do this, put the food, unwrapped, into a covered pan or carton, and place in the coldest section of the freezer for 2 or 3 hours. It can then be closely wrapped and heat sealed.

Freezing temperatures of 0° F or lower should be maintained during the entire storage period.

DIRECTIONS FOR FREEZING PRECOOKED FOODS

FOOD	TO PREPARE	TO PACKAGE	TO PREPARE FOR TABLE	MAXIMUM STORAGE
Apples, baked	Bake as usual. Do not overcook or get too brown. Cool quickly.	Package in bags or rigid container; cover with sirup.	Thaw in wrapping, or unwrap and heat in oven.	4 months
Applesauce	Make as usual. Omit spices. Cool.	Pour into bags, or rigid container.	Thaw in wrapping.	8-10 months
Baby foods	Cook until soft enough to press through sieve. Be careful not to stir air into mixture.	Package in one-meal portions. Use individual covered cups, or quick freeze in ice cube trays. Wrap individual cubes.	Warm in top of double boiler.	12 months
Bananas	Select firm but fully ripe fruit. Leave whole or cut in half crosswise. Insert plastic or hard-rolled paper lollipop stick. Dip in ascorbic acid solution, using 1 teaspoon acid to 1 pint of chilled, freshly boiled water.	Quick freeze. Then dip in melted, semisweet chocolate heated to 80° F to 85° F. Place on oiled pan. Freeze for a few minutes. Wrap each banana. Store in bag or easily opened carton.	Let stand in refrigerator 10 minutes before serving.	1-2 months
Biscuits	Little time saved. Better to use mix.			
Bread & Rolls: Coffee cake Gingerbread Nut and Fruit Steamed Yeast	Baked product more certain of success than unbaked. Bake as usual to light brown. Cool quickly.	Wrap tightly in sheet wrapping. Seal.	Thaw in wrapping at room temperature or in oven at 400° F.	Quick: 2-4 months Yeast: 6-12 months
Unbrowned rolls	Prepare yeast rolls as usual. Bake 20 minutes at 275° F. The rolls should be pale but baked in the center. Cool on rack.	Quick freeze, then wrap carefully. Seal. Store in carton to prevent crushing.	Thaw in sealed wrapping 10-15 minutes at room temperature. Spread out on baking sheet. Grease lightly. Bake at 450° F for 7-10 minutes.	2-4 months

Cakes: Angel Sponge Chiffon	Use favorite recipe. Bake. Cool on rack.	Quick freeze whole or in meal-sized portions. Wrap closely. Seal. Pieces that are to be used soon may be put into plastic bags, and placed on top of other packages in freezer. Store whole cakes in box or carton to prevent crushing.	Thaw in wrapping at room temperature 2-4 hours or in oven 15-20 minutes at 300° F.	4-6 months
Butter type	Bake in square or oblong pan whenever possible. Add ½ to 1 teaspoon lemon juice or vinegar to batter to insure softer crumb. (This will not alter the flavor.) May be frosted with confectioner's sugar—butter frosting.	Same as above for baked product.	If unfrosted, thaw 10-15 minutes in oven at 375° F.	8-10 months
	Unbaked batter may be frozen, but volume of cake will be smaller. Use double-action baking powder.	Package in carton or in cake pan lined with waxed paper or metal foil.	Stored in cake pan: Thaw 1 hour at room temperature. Carton: Thaw until just soft enough to transfer to pan. Bake as usual.	4-6 months
Cup cakes: Baked	Use favorite recipe. Bake in paper cups.	Quick freeze. Wrap each cake or pair of cakes in cellophane. Store in box that can be opened easily for removal of number needed at one time.	Thaw at room temperature about 1 hour or in oven at 300° F for 10 minutes.	2-3 months
	Unbaked	Use double-action baking powder. Pour batter into paper cups.	Bake from frozen state at 275° F for 15 minutes then at 350° for an additional 15 minutes.	1 month
Cheese cake	Prepare and bake as usual.	Wrap in cellophane. Store in carton with overwrap.	Remove wrap and thaw in refrigerator 4-6 hours.	4 months

DIRECTIONS FOR FREEZING PRECOOKED FOODS—(Continued)

FOOD	TO PREPARE	TO PACKAGE	TO PREPARE FOR TABLE	MAXIMUM STORAGE
Fruit cake	Use standard recipe. Bake in square or oblong pans whenever possible. Cool on rack.	Wrap whole or in meal-sized portions. Use cellophane or metal foil with overwrap.	Thaw wrapped at room temperature 2–5 hours, depending on size.	12 months
Upside-down cake	Use favorite recipe. Use double-action baking powder. (Better unbaked.)	Quick freeze in pan in which it is to be baked. Wrap closely. Overwrap or store in carton.	Unwrap. Bake unthawed in 350° F oven for 45 minutes.	2 months
Cereals: Breakfast	It is sometimes practical to freeze long cooking breakfast cereals. Prepare as usual, but keep consistency thinner.	Pour into rigid container without stirring. Cover with cellophane or locker paper cut to fit surface. Package in meal-sized portions.	Heat without previous thawing, in top of double boiler. Do not stir.	1 month
Rice Macaroni	Freezes well, but is usually better to cook at time of serving. If frozen, cook dry but slightly underdone, with grains or pieces separated.	Use cartons or plastic bags. Seal.	Thaw in sauce, or in a steamer, for about 10 minutes.	1 month
Cornmeal mush or scrapple	Cook until thick. Mold in bread pan. Slice.	Separate slices with 2 pieces of cellophane or locker paper. Pack in carton.	If used as mush, reheat in double boiler. Add water if needed. For frying, do not thaw. Brown in heavy, greased skillet.	6 months
Cheese: Cheddar	Cut into blocks that will be used within a few days. Rind may be removed.	Wrap. Quick freeze.	Thaw, wrapped, in refrigerator.	4 months
Cottage	Use dry curd.	Package in bags or tub-type carton.	Thaw in carton in refrigerator.	4 months

Combination Dishes: creamed (meat, poultry, fish)	Add $\frac{1}{4}$ teaspoon gelatin to each quart of white sauce, or use waxy rice flour for thickening. Cool rapidly by setting pan in ice water. Stir, but do not beat. Work with small quantities. Or: Package ingredients separately and add to freshly made cream sauce at time of serving. Omit hard-cooked eggs and boiled potatoes. Use as little fat as possible.	Use rigid, wide-mouth container. Package in layers separated with double thickness of cellophane or locker paper. Cover with single thickness of paper cut to fit surface. Leave $\frac{1}{2}$ -inch head space in carton.	Heat, from frozen state, in top of double boiler or in oven, 25-30 minutes. Caution: Do not let stand at room temperature.	6-8 months
Baked beans Ravioli Spaghetti and meat balls Stew, etc.	Make as usual, keeping fat to minimum. Omit potatoes. Vegetables should be slightly undercooked.	Be sure that meat is covered with sauce or broth.	Heat, from frozen state, in top of double boiler, or bake in 375° F oven 25-30 minutes. Do not overcook.	6-8 months
Cookies: Baked	Use favorite recipe. Cool quickly on rack.	Use cartons or cellophane bags, with waxed paper between layers and in spaces. Wrap in cellophane.	Thaw, wrapped, $\frac{1}{2}$ -1 hour if crisp type. Soft cookies may be placed on serving plate. Proceed as though fresh.	6-8 months 5-6 months
Unbaked	For bars or refrigerator, form into long roll. Slice if desired. For drop cookies, prepare as usual. Drop on cooky sheet.	Quick freeze. Store in top-opening box with cellophane or heavy waxed paper between layers.	Place on cooky sheet. Bake without thawing 10-15 minutes.	3-4 months
Cranberries	Prepare sauce as usual or make cranberry relish.	Use rigid container. Cover with locker paper or cellophane cut to fit. Leave $\frac{1}{2}$ -inch head space.	Use as you would fresh product.	Sauce: 12 months Relish: 2 months
Cream	Use 40 per cent cream: whip sweetened.	Put dabs on pasteboard. Quick freeze. Wrap in cellophane or store in carton.	Serve unthawed.	1 month

DIRECTIONS FOR FREEZING PRECOOKED FOODS—(Continued)

FOOD	TO PREPARE	TO PACKAGE	TO PREPARE FOR TABLE	MAXIMUM STORAGE
Cream puffs	Make as usual. Cool quickly. Open and take out any moist parts. May be filled with ice cream before freezing. Do not fill with cream sauce.	Wrap in cellophane. Put into rigid containers without crowding or mashing. Fill spaces with crumpled waxed paper. Choose container that can be easily opened for removal of number needed.	Thaw, in wrapping, at room temperature for 10 minutes.	1 month
Custard	Not satisfactory product by known methods.			
Doughnuts	Fry in high quality fat. Cool.	Stack in carton and use an overwrap, or wrap separately before packing into carton, or put into plastic bag.	Reheat in oven at 400° F.	3 weeks
Fish: Shell fish (crab, lobster, shrimp)	Boil 10–20 minutes in salt solution, using 3 tablespoons salt per pound of fish. Drain. Remove shells and pick out meat. You may leave some legs of crab or lobster in cracked shell for special treat.	<p>1. Pack meat solidly in container. Cover with salt solution, using 1 teaspoon salt to 1 pint water.</p> <p>or:</p> <p>2. Mix with cocktail sauce, and package in individual servings.</p> <p>3. Pack cracked crab or lobster legs in 1 teaspoon salt to 1 pint water.</p> <p>4. Mix meat with cracker crumbs and egg. Make into flat cakes. Stack cakes separated with pieces of locker paper.</p>	<p>1. Thaw in container in refrigerator 5–6 hours.</p> <p>2. Individual servings may be thawed for 30 minutes at room temperature.</p> <p>3. Drain and use as fresh fish.</p> <p>4. Separate cakes. Thaw at room temperature. Brown in butter. Serve hot.</p>	3–4 months

Baked or boiled	Prepare as usual. Leave in large pieces. Cool.	Wrap closely in pliable sheet, or bag, or in rigid container and cover with broth.	Thaw in refrigerator, wrapped, use fresh.	1-2 months
Fish loaf	Prepare as usual. If onions are used, cook until clear in good quality fat. Put into loaf pan. Do not bake.	Cover surface with piece of sheet wrapping cut to fit. Wrap in flexible sheeting, or bag.	Thaw in refrigerator, wrapped, for 1 to 2 hours. Bake in oven 450° F for 15 minutes then 350° F to finish.	1-2 months
Frostings and fillings	Satisfactory: candy type (if corn sirup or honey is used in making) fruit fillings or confectioneer's sugar and fat. Unsatisfactory: cream fillings, boiled icings, or soft frosting.	Cake may be frosted before freezing, or frostings and fillings may be packaged in rigid containers.	Unwrap frosted cake. Thaw frosting in container in refrigerator.	1-3 weeks
Frozen desserts: Ice cream Mousse Sherbet	Use recipe with cooked base, gelatin or other stabilizer. That made in a mechanical freezer is preferable to refrigerator-tray type. Freeze until slightly hard to turn. Be sure mixture is smooth and creamy, free from crystals. Mousse needs only to be mixed and poured into container. (Whipped, dry skim milk may be substituted for heavy cream.)	Transfer frozen mixture from freezing can to rigid container. Press cellophane or plastic film, cut to fit, close to the surface. May be packaged in individual, covered cardboard cups. These should be stored in carton with an overwrap, or a plastic bag. Package in mold, to be sliced, or in individual molds.	Let stand in refrigerator until soft enough to cut or scoop out. Thaw slightly at room temperature.	1-2 months 1-2 months
Gravy	Better to freeze broth and then thicken while heating, or use waxy rice flour for thickening. Leftover gravy should be reheated, cooled quickly.	Pour into rigid container. Cover surface. Leave 1/2-inch head space. Package in layers, using sheeting material to separate.	Heat frozen block and then thicken Reheat in double boiler. Break frozen blocks to hasten heating process. Serve immediately.	6-8 months 1-2 months

DIRECTIONS FOR FREEZING PRECOOKED FOODS—(Continued)

FOOD	TO PREPARE	TO PACKAGE	TO PREPARE FOR TABLE	MAXIMUM STORAGE
Meats, poultry Fried or broiled	Generally unsatisfactory, little time saved.			
Roast	Cook as usual. Remove as much fat as possible. May be boned to save space, but keep in large pieces. Cover with sauce or broth.	Package in rigid container. Leave head space. Cover surface with piece of sheet material cut to fit. Use crumpled, stiff paper to hold in place and to keep pieces of meat in liquid.	Thaw in refrigerator 5 or 6 hours. Then make into meat pie, hash, stuffed peppers, etc. Or: Heat chunks slowly in broth, thicken gravy, and add freshly cooked vegetables for stew; or heat the large pieces slowly in broth and use as pot roast.	2-4 months
Meat loaf	See Fish loaf.			
Ham	Bake or boil. Cool. Bone. Keep pieces as large as possible.	Package in sheet wrapping, or in plastic bag.	Thaw in wrappings to slice cold, or heat in moisture-proof bag by immersing in boiling water.	2-3 weeks
Muffins	Very little time saved. Perhaps better to use ready-mix.			
Pastry	Regular pastry or crumb crust may be made as usual. Fit into pie pan or the light-weight aluminum plates that are made for freezing.	Stack with heavy waxed paper between each. Cover top pie crust with cellophane, press close. Wrap closely in thin sheet material. Overwrap.	Bake, unthawed, until lightly brown in 475° oven.	6-8 weeks
Pies: Chiffon	Make with gelatin base. Do not put whipped cream on top.	Quick freeze. Wrap in thin sheet material. Seal. Store in carton.	Thaw unwrapped at room temperature for 1 hour.	1 month
Custard	Not satisfactory by known methods.			

Fruit	Freeze unbaked. Do not cut vents in top crust. Steam, then cool, light-colored fruits before making into pie, or slice into salt water (use 1 teaspoon to 1 pint water). Drain. Put into sodium sulfite solution for 2 minutes. (Use 1 teaspoon sodium sulfite to 1 quart of water.) Drain.	Quick freeze in aluminum freezer pie pans or regular pie pans. Wrap closely in sheet wrapping. Store in carton or cover with second pan with edges taped together.	Remove wrapping. Cut vent holes in upper crust. Bake, without thawing, 15–20 minutes in hot oven (475° F) then at 375° F 20–30 minutes, or until done.	2–4 months
Mince	Omit suet if to be stored for long period. Freeze unbaked or baked.	Same as for fruit pie.	Same as for fruit pie.	6–8 months
Meringue	Not satisfactory by known methods.			
Pumpkin	Brush crust with slightly beaten egg white. Allow this to stand for a few minutes in air before adding filling. Be sure crust and filling are very cold before combining.	Same as for fruit pie.	Bake 10 minutes at 400° F, then lower heat to 325° F to finish baking.	1–3 weeks
Potatoes: Baked and stuffed	Select good baking quality potatoes. Bake as usual. Scoop potato from shell, mash. Add cream or butter and seasonings, then fold in beaten white of egg. Carefully refill shells, sprinkle with cheese, if desired, or level off and fit halves together.	Place in top-opening carton if tops are rounded, or in plastic bags if halves are put together.	Bake from frozen state at 375° F until thoroughly heated and lightly browned.	7–10 days
French fries or Shoestring	Cut strips rather small. Fry quickly to light brown in fresh, first-grade fat. Drain. Cool quickly.	Pack in rigid container or plastic bag. (Coffee or shortening cans are good.)	Spread out on cooky sheet. Heat and finish browning in 475° F oven. Watch carefully.	1 month

DIRECTIONS FOR FREEZING PRECOOKED FOODS—(Concluded)

FOOD	TO PREPARE	TO PACKAGE	TO PREPARE FOR TABLE	MAXIMUM STORAGE
Potatoes (continued) Mashed	Cook; mash, and add slightly more milk or cream than usual. Beat until fluffy. If beaten white of egg is folded into hot whipped potatoes, a fluffier product results.	Spoon carefully into rigid container.	Thaw just enough to slip frozen block into top of double boiler. Heat without stirring. Serve immediately.	2 weeks
New (very small)	Boil in jackets. Peel.	Pack in bag.	Thaw in bag. Use as freshly cooked.	6 months
Scalloped	Prepare and bake as usual until not quite done, and pale in color. Leave in baking dish. Cool.	Cover surface with packaging material cut to fit. Wrap dish in packaging material or slip into plastic bag.	Place in cold oven, or partially thaw at room temperature. Add milk if necessary. Complete baking.	2 weeks
Sweet	Boil. Purée or candy.	Pack in bag or rigid container.	Heat.	6-8 months
Puddings: Steamed	Prepare and steam as usual, using as little fat as possible. (May be steamed in plastic bag.) Remove from container. Cool in air.	Return to original container and wrap or put into bag.	Reheat in steam. May be reheated in plastic bag in which it was steamed and stored.	6-8 months
Tapioca, Rice, or Bread	Prepare as usual. Cool.	Package in rigid container. Leave ½-inch head space. Cover surface with sheet material cut to fit. May be packaged in individual, covered cups.	Thaw in container in refrigerator. Serve as usual.	2 weeks
Salad	Very few salads freeze well. Mousse type can be frozen. If calorie conscious, try using whipped, dry milk instead of whipped cream in recipe.	Package in mold to be sliced, or in individual molds.	Thaw at room temperature. Serve very cold.	1-2 months

Sandwiches	Two to four weeks' supply may be frozen at one time. Use day-old bread. Spread with softened butter. Omit crisp vegetables. Hard-cooked egg white should either be omitted or chopped very fine.	Wrap individually or in pairs. Spread out and freeze. (Soft, unfrozen sandwiches may be crushed if packed tightly.) Store in box or plastic bag.	Remove from freezer 3-4 hours before serving. Thaw in wrap.	2-4 weeks
Open-face	Make as usual. Be sure to spread to very edge.	Spread out and freeze. Pack in layers in top-opening box. Separate layers with sheet cut to fit.	Arrange on serving trays 1 hour in advance.	1-2 weeks
Sauces	Either dessert sauces or meat sauces freeze successfully.	Package in serving portions. Surface with sheeting cut to fit.	Thaw in package.	3-4 months
Soup	It may be worthwhile to freeze soups that require a long time to prepare. Omit boiled potatoes. Whenever possible, concentrate by using less liquid in preparing, or by cooking down to concentrated volume.	Package in meal-sized portions, or freeze in ice cube tray. Then put cubes in carton or plastic bag.	Heat from frozen state. If concentrated, add hot liquid to reconstitute. Freshly cooked vegetables may be added.	4-6 months
Waffles	Make and bake to light brown.	Wrap individually or in pairs.	Heat, unthawed, in pop-up toaster, or on cooky sheet in oven.	4 weeks
Yogurt	Make as usual.	Freeze in original container, leaving head space.	Thaw in container. Use while cold.	3 months

WHERE TO FIND IT . . .



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